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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/637,495	08/11/2000	Gregory J. Hewlett	TI-28454	7603

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EXAMINER

NELSON, ALECIA DIANE

ART UNIT PAPER NUMBER

2675

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/637,495

Applicant(s)

HEWLETT ET AL.

Examiner

Alecia D. Nelson

Art Unit

2675

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. ***Claims 1-9*** are rejected under 35 U.S.C. 102(e) as being anticipated by Baldwin (U.S. Patent No. 5,986,640).

With reference to **claim 1**, Baldwin teaches a method of receiving an image word for an image pixel (column 4, lines 1-4) and the image data word comprises of at least a first and second image data bit (figures 4,5 and 6). Baldwin divides an image frame period into at least two refresh (reset) periods, wherein each refresh period comprises a period in which at least two image data bits are displayed (figure 6 shows the division of sub-frames and column 7, line 19-62; Figure 7, column 8, line 12). As shown in figures

6a - 6e, Baldwin teaches displaying the first image data bit during some, but not all, of the refresh period and displaying the second image data bit during more of the refresh period than the first image data bit was displayed.

With reference to **claim 2**, Baldwin teaches all that is required as explained above with reference to **claim 1**, Baldwin also teaches that these the display periods are allocated to prevent flicker of the image data bit display by the method described in rejection of **claim 1** (column 7, lines 19-25 and lines 34-47).

With reference to **claim 3**, Baldwin teaches a controlling circuit (119) that receives the video signal and determines the amount of time the light should be modulated on the minor devices (column 4, lines 1-15).

With reference to **claims 4-9**, Baldwin teaches in Figure 6e a method of dividing an image frame period into at least three refresh periods wherein a first image data bit is displayed during at least one refresh period (1, 2), a second image data bit is displayed during at least two refresh periods (4a, 4b), and a third said image data hit is displayed during at least three refresh periods (16a, 16b, 16c) and where first second and third image data bits are displayed during different numbers of refresh periods.

### ***Response to Arguments***

3. Applicant's arguments filed 6/20/05 have been fully considered but they are not persuasive.

It is argued by the applicant that the reference fails to teach "each refresh period comprising a period in which at least two image data bits are displayed". However it is the examiner's position in that the applied reference teaches the newly claimed limitation. More specifically, in Figures 6a-6e, it can be seen that each refresh period, as defined above, consist of a period in which at least two image data bits are displayed. Also it is taught that the reset pulses are applied every two units to prepare the mirror device for their next orientation state (see column 8, lines 13-15). Therefore, if the first refresh period consist of 16 bits and 8 bit units, it is therefore possible to display at least 2 bits in each period before the refresh occurs.

For these reasons it is believed that the present reference reads on the limitations of the claimed invention.

### ***Conclusion***

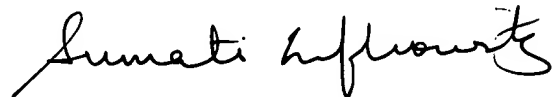
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alecia D. Nelson whose telephone number is 571-272-7771. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on 571-272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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5. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

And/And  
September 29, 2005

A handwritten signature in black ink, appearing to read "Sumati Lefkowitz", written in a cursive style.

**SUMATI LEFKOWITZ  
SUPERVISORY PATENT EXAMINER**